AMERICAN CHEMISTS MEET

By LEFEVER M. LEE, '31

For the second time in its history the American Chemical Society was the guest of the Columbus Section, and this time the majority of their meetings were held on the Ohio State University campus. The spring meeting, which was the 77th annual convention of the society, was in session in Columbus on April 29 and 30, and May 1, 2, and 3, 1929.

The Council of the Society opened the program on Monday with a general business meeting at the Neil House. Following this meeting was a dinner, an official reception by the officers of the Council and then came an informal dance in the Grand Ball Room of the Neil House.

Dr. Irving Langmuir is the president of the society. His reputation is international as well as American and his contributions to both theoretical and practical chemistry have won several coveted medals for him. At present he is one of the ten most prominent chemists in the world.

Dr. Langmuir was graduated from Columbia with a Bachelor of Science degree in Metallurgical Engineering and later received his Doctorate at Göttingen. For the past twenty years he has been employed by the General Electric Company at Schenectady and now he is Associate Director of the research laboratories.

Chemistry Building on The Ohio State University campus in which all of the divisional meetings of the American Chemical Society sat April 30, May 1 and 2.

This building alone cost approximately $1,000,000. The four-story front part is 308 feet in length with a wing width of 80 feet; has a ground space of 32,000 square feet and a floor space of 185,000 square feet. The one-story part of the building has a floor area of 68,000 square feet.

The general meeting started Tuesday morning, April 30, when the members of the society divided themselves into two groups. Group A was made up of those interested in industrial and engineering chemistry; this session was at the Neil House. The division of the society dealing with physical and inorganic chemistry had charge of Group B in the chamber of Commerce Auditorium.

A very interesting talk given by Julius F. Stone was one of the high points of the convention. Mr. Stone, chairman of the board of trustees of Ohio State University, spoke in Memorial Hall, Tuesday evening. His topic was his trip through the Grand Canyon of the Colorado River. Accompanied by four friends, he made a journey of approximately fourteen hundred miles through all the canyons of the Green and Colorado Rivers. The party left Green River, Wyoming, on September 12, 1909 and continued all the way to Needles, California. Only three other parties had made the trip previous to this time. The object of the expedition was to make as complete a collection of photographs as possible of the entire series of canyons. In obtaining his object Mr. Stone was particularly successful, securing some fourteen hundred photographs. His lecture was illustrated by means of slides reproduced from selected and typical photographs of the list.

Because of the varied interests represented in the society it has been found a matter of great convenience to divide it into sixteen divisions and both Wednesday forenoon and afternoon were devoted to the meetings of these groups. Papers were read in these sessions on subjects related to the major interests of each division, many new and interesting facts being made public at this time.

A new use was found for sound motion pictures when a "talkie" was shown Wednesday forenoon before the division of chemical education. The subject of this film was "Oil Films on Water." Although Dr. Langmuir, the experimenter seen and heard, was attending the convention in person, the advantage claimed was that the sound picture eliminates the necessity of transporting complicated apparatus and the use of materials which are frequently very costly. This innovation may do away with the practice of reading treatises and may introduce a system such that scientists from all over the world may be seen and heard performing revolutionary experiments in their own laboratories.

During the course of the convention the 16 divisions of the society discussed various matters pertaining to their respective fields. Numerous new phases in the science were brought to light.

The boiler room chemistry division showed the behavior of single specks of coal dust, each photographed as it fell through the heated enclosure. By this means science has been able to acquire new knowledge of the rate of burning of individual particles of solid fuel, including coal, coke, and charcoal, and to record the time required for each

(Continued on Page 19)

AMERICAN CHEMISTS MEET

(Continued from Page 10)

to be completely burned.

The division of gas and fuel chemistry considered the problem of Ohio coal. Professor D. J. Demorest declared that Ohio consumers should give serious consideration to the use of Ohio coals for gas and domestic coke-making use. He has experimented with the carbonization of these coals. In view of the amount and quality of the products of Ohio mines, he said, this is practicable.

A new control method designed to enable beet sugar manufacturers to realize bigger yields in their "bad years," perfected a week ago at Ohio State University by Dr. James R. Withrow and A. R. Choppin was announced before the convention.

Dr. C. E. Kenneth Mees of the Eastman Kodak Co., Rochester, N. Y., spoke at Memorial Hall on "The Formation of the 'Photographic Image'" on Wednesday evening. He said that the sensitiveness of films is not due to the silver bromide only, but is in some way connected with the presence on those grains of specks of some other substance. After long and careful study it has been found that those specks are produced by an accidental impurity present in the gelatine. This is derived from the plants eaten by the animals from whose skins the gelatine is made. Through the courtesy of the Lick Observatory he also presented a motion picture showing the rotation of Jupiter.

There was organized on Thursday an international society known as the Society of Rheology. Rheology is the science of flow. The new study centers on the flow of metal, glass, cement, and other apparently flowless materials. This study is to prevent much of the waste and economic loss in industries due to tackiness, stickiness, and harshness of these materials. The objective of the Society is the advancement of fundamental and practical knowledge concerning the deformation and flow of matter.

On Thursday morning, meetings of seven divisions of the society were held and then the members were taken to the Battelle Memorial Institute on King Ave., where they were guests at a luncheon given by the Institute trustees. After an inspection trip through this well-equipped metallurgical research laboratory, the members were conducted through several of the Columbus industrial plants where chemistry is extensively used.

The afternoon was given over to a choice of industrial trips through and about Columbus, a golf tournament, a trip to Ohio Wesleyan University and a visit to the home of Thomas Midgley, Jr., in Columbus.

Three industrial trips left Columbus Friday morning for visitation to points of interest. The first trip went to Dayton where Wright Field, the Frigidaire Corporation and National Cash Register Company were the main attractions.

The second trip went to Newark and Zanesville to visit the Pure Oil Company, the A. H. Heisey and Company, the Fraunfelter China Company and the S. A. Weller Company. The last three companies named above are engaged in the manufacture of china and glassware.

The last and shortest of the industrial visits was a journey to Circleville to the Midwest Box Company and the Meade Pulp and Paper Company in Chillicothe.